

## AFTERSCHOOL TRAINING TOOLKIT

### Tutoring to Enhance Science Skills

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#### Tips for Tutoring Students in Science

The sample lessons provided here build on one another and help students build on their own skills. **Note: these lessons work best in sequential order.** These tips will help you make the most of this lesson series.

- Begin with the lesson on Interpreting Data from Bird Feeders.
- Next, complete the lesson on Learning to Make Data Tables.
- Use the data tables that students create to complete the lessons on line graphs and bar graphs.
- The lesson on Learning to Make Bar Graphs is ideal for students in the primary and upper elementary grades, but can be used for older students who struggle with this concept.
- The lesson on Learning to Make Line Graphs is ideal for students in upper elementary grades, middle, and high school.

Here are some things to think about when helping students increase their understanding of science content and improve their skills.

- Complete each lesson on your own before working with students. Use the guidelines provided in each lesson.
- Don't hesitate to ask for help from teachers or colleagues to maximize your own understanding of the material before you begin a tutoring session.
- Talk with school-day teachers and parents to understand the needs of your student and plan tutoring sessions that target those needs.
- Examine student work. Ask students to show you graphs and data tables that they have made or that are in their texts and school-day science work.
- Provide encouragement. Remind students that science is fun, that it is for all students, and that everyone can succeed.
- Set the tone in the tutoring session by asking questions that keep students thinking, learning for themselves, and assessing their progress. Remember that giving answers without asking students to reason and think for themselves inhibits learning. Give information as often as is needed to clarify or redirect thinking.
- Provide positive feedback and be generous with praise.
- As students' confidence increases, tutor supervision should decrease. Challenge students to use what they know to solve a problem.

Use the materials in these lessons to help students with a common problem—recording, displaying, graphing, analyzing, and interpreting data.